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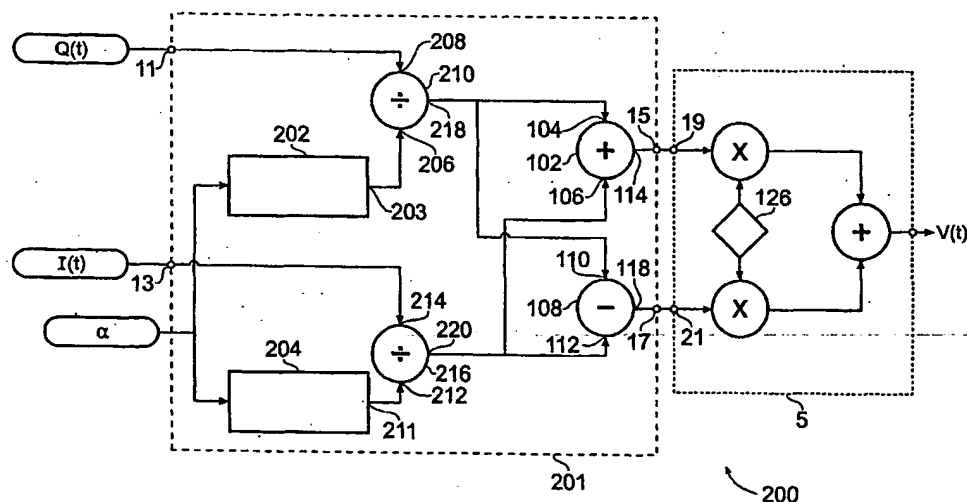
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- (71) Applicant (for all designated States except US): **TELEFONAKTIEBOLAGET LM ERICSSON (publ)** [SE/SE]; S-164 83 Stockholm (SE).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **BRISTOW, Robert** [GB/GB]; 9 Sonning Close, Basingstoke, Hants RG22 5JJ (GB).
- (74) Agent: **VIGARS, Christopher, Ian**; Haseltine Lake, Imperial House, 15-19 Kingsway, London WC2B 6UD (GB).
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(54) Title: **METHOD AND APPARATUS FOR QUADRATURE MODULATION TECHNICAL FIELD**



(57) Abstract: A method and apparatus (200) for modulating I and Q signals to compensate for phase error between the quadrature outputs of a local oscillator (126) of a quadrature modulator(s). The error in the quadrature outputs of the local oscillator is effectively compensated by pre-processing (201) incoming $I(t)$ and $Q(t)$ baseband signals to generate composite signals adding (102) and subtracting (108) scaled (202, 210, 204, 214) $I(t)$ and $Q(t)$. These composite signals form the input (19, 21) of quadrature modulator(s), the method comprising the steps of: applying a first scaling factor to an input I signal; applying a second scaling factor to an input Q signal; adding the scale I and Q signals; subtracting the scale I and Q signals; and quadrature modulating the added and subtracted signals.



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